

Institute of Medicine

*The purpose of public health is
to fulfill society's interest in*

..... ?

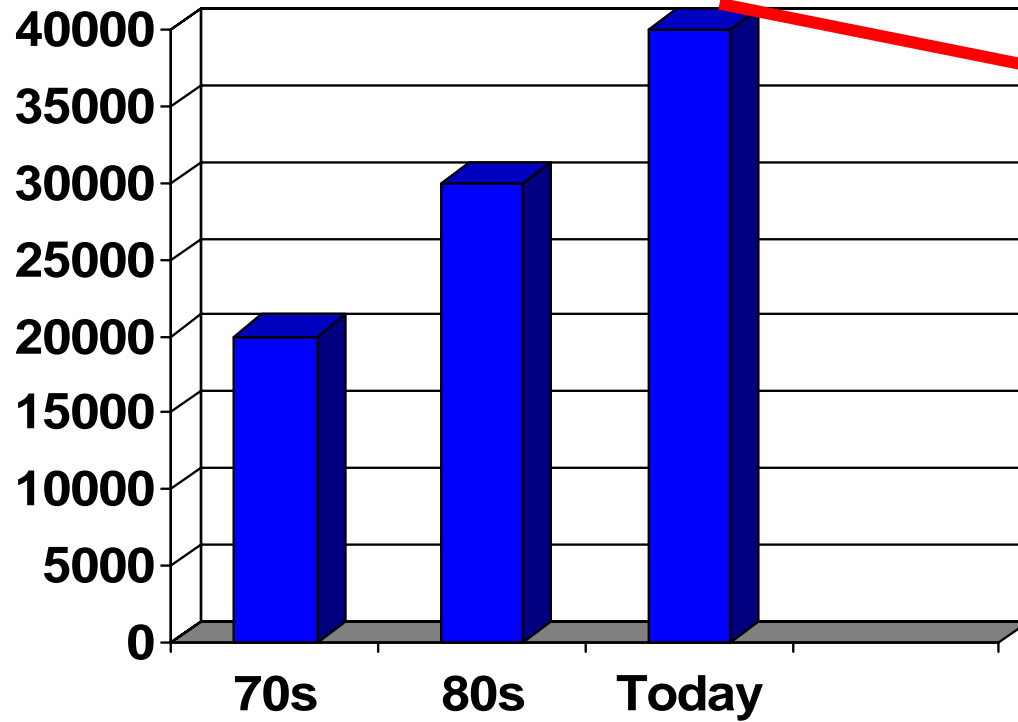
Institute of Medicine

*The purpose of public health is
to fulfill society's interest in
assuring the conditions in which
people can be healthy*

I Believe:

- The Greatest Threat to Americans' Health is
- How We Manage Our Wealth
- Supersizing and the Quality of American Life

Supersizing Advertising :Number of TV Ads Seen By Children

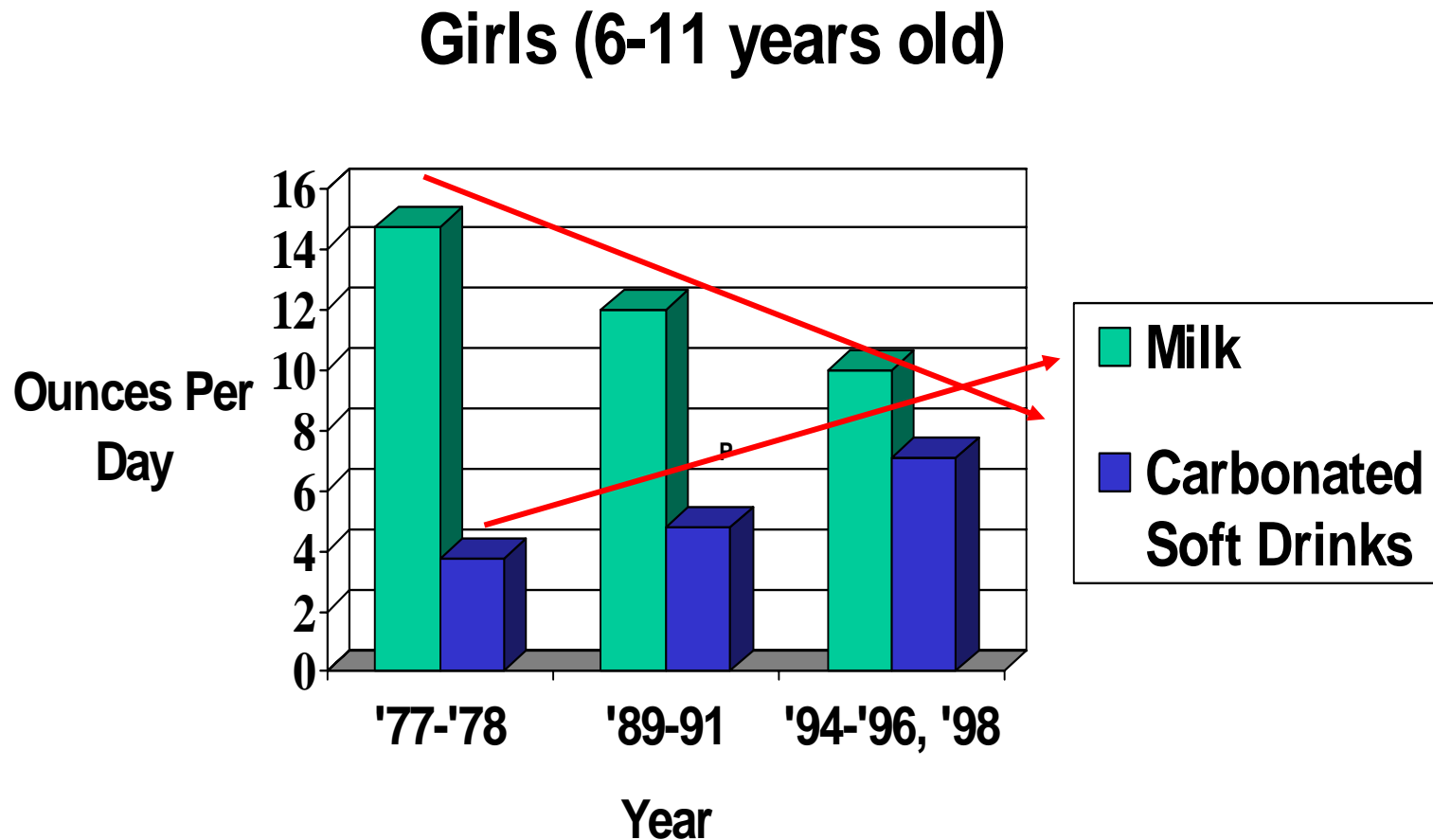


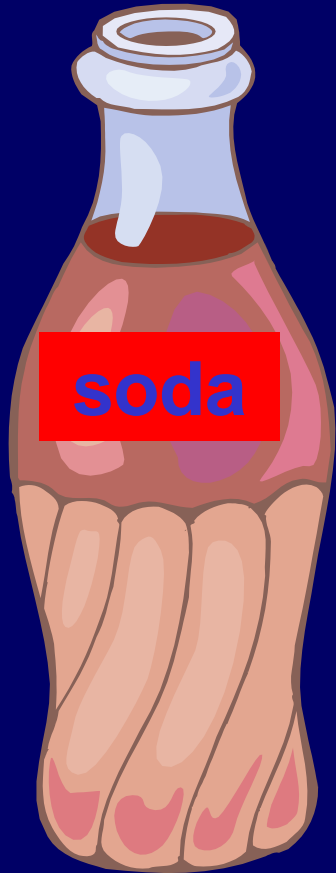
40,000 per year

Average daily time spent using media:

5 ½ HOURS

Supersizing Soda Consumption





ONE 20 oz SODA per day

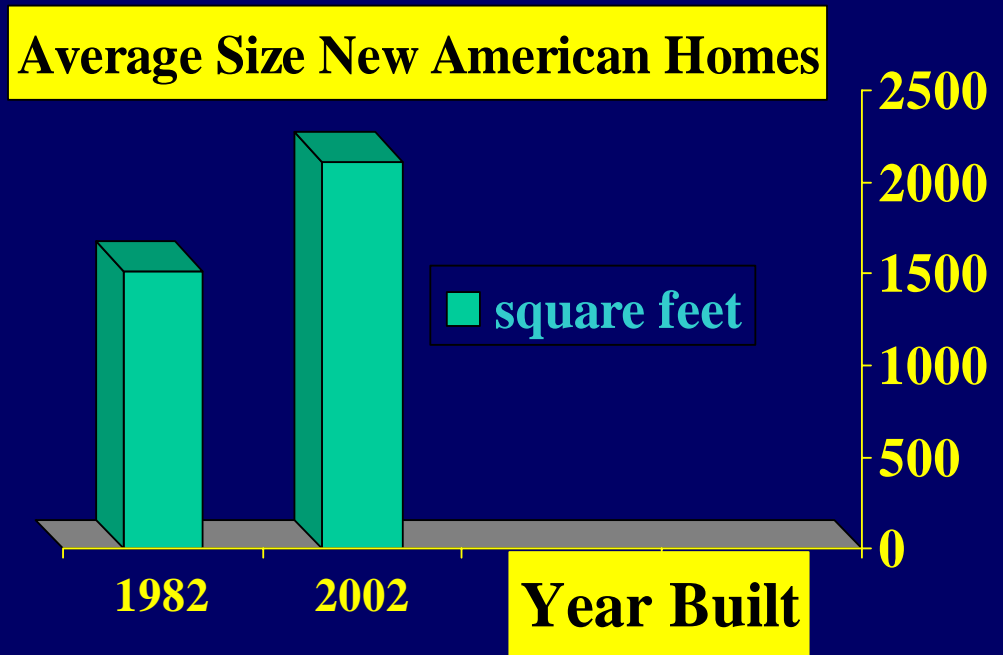
- *16 teaspoons of SUGAR*
- *250 calories*
- *8.75 hrs of moderate walking per week*

Microsized Fitness of California's Children

Annual California Fitnessgram

- **Conducted in Grades 5, 7, and 9**
- **Measures 6 major fitness areas**
(e.g. aerobic capacity, body composition, flexibility)
- **2004 Results: Who passed all standards?**
 - 25% → Grade 5**
 - 29% → Grade 7**
 - 26% → Grade 9**

Supersizing Our Homes



Supersizing Land Consumption



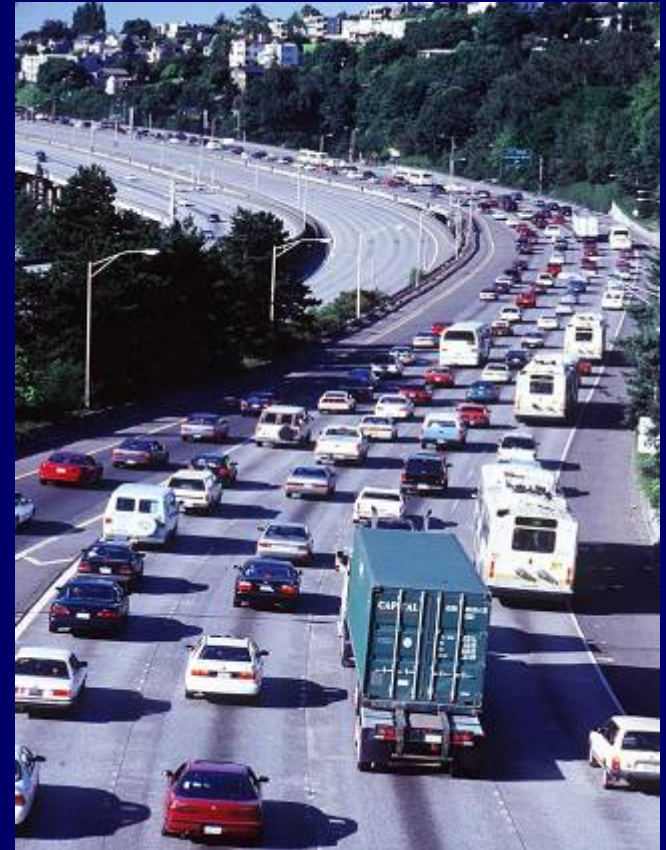
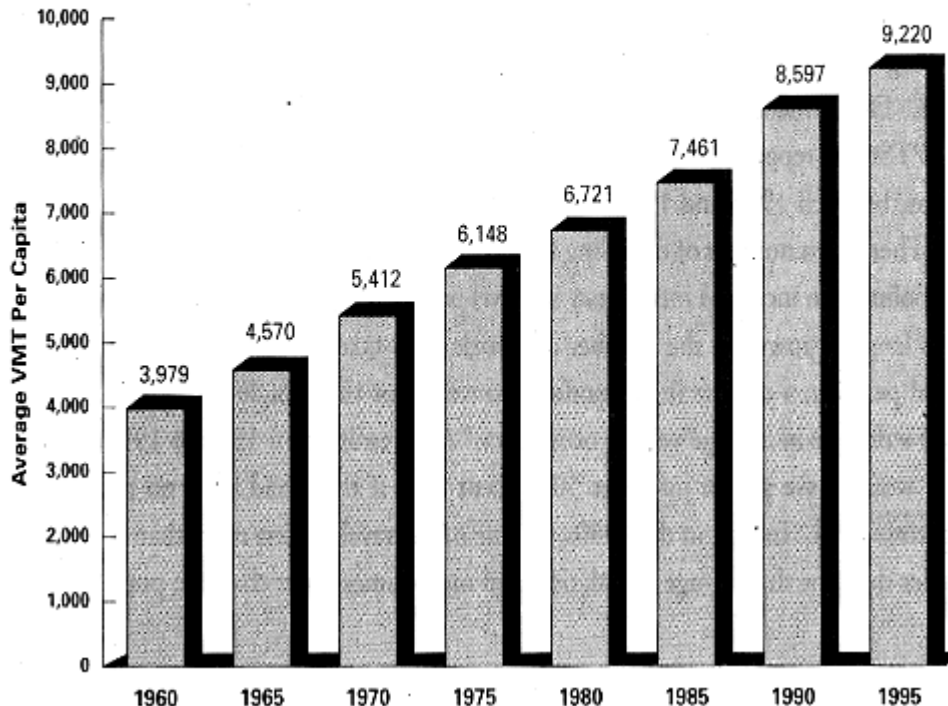
**California Paves or Builds
on over 400 acres every day**

Supersizing Vehicle Travel

Figure 2-2

Vehicle Miles Traveled (VMT) Per Capita, 1960–1995

Source: Bureau of Transportation Statistics, U.S. Department of Transportation, *National Transportation Statistics 1998*, Washington, DC: 1998, Table 4-12; U.S. Bureau of the Census, "Historical National Population Estimates," Washington, DC: April 2, 1998.



Miles per Capita: 1960 to 1995

From 4000 to 9200
VMT per person

Supersized Air Pollution in California

10 Worst Cities for Air Quality



Supersized Schools

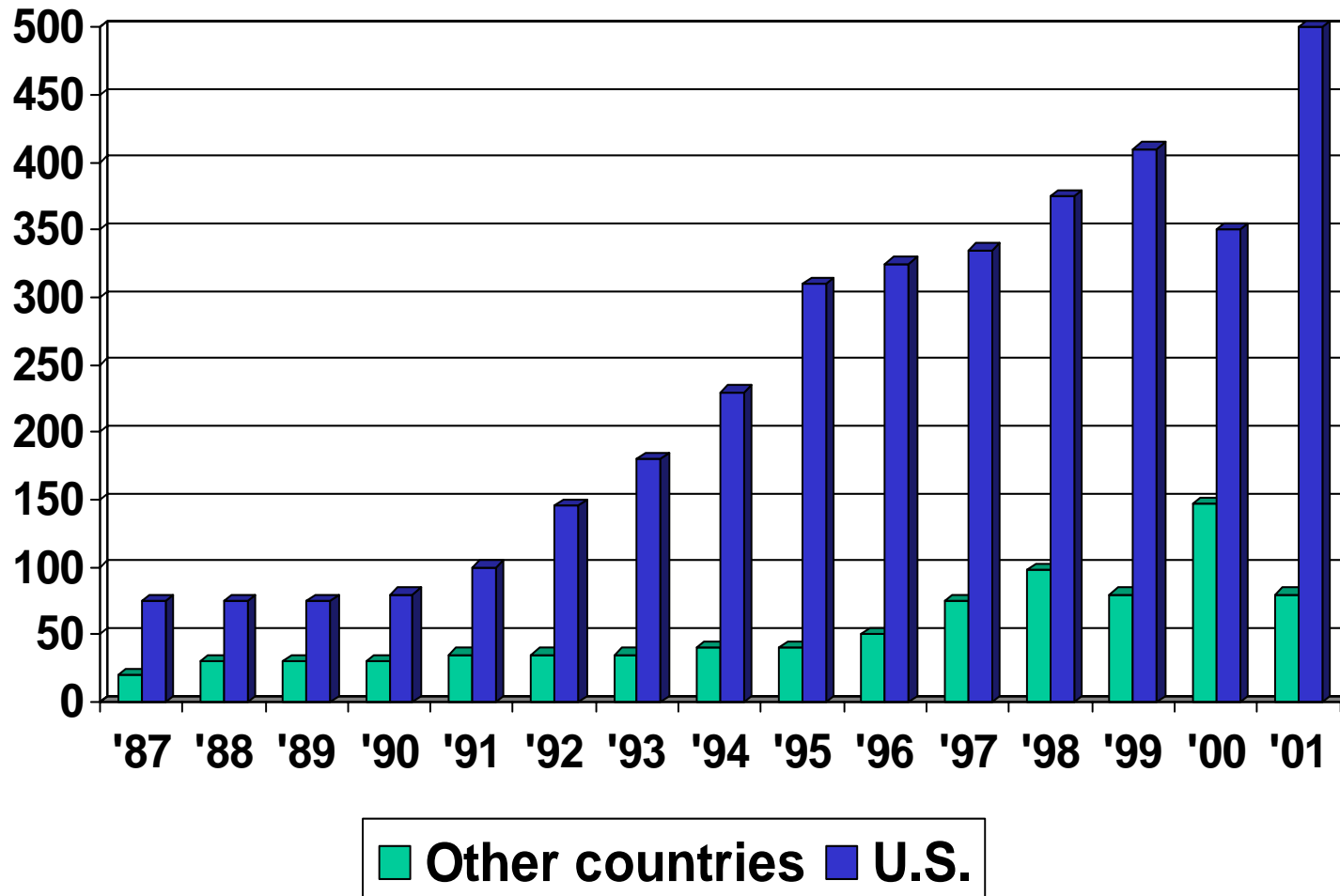


Credit: South Carolina Coastal Conservation League



Credit: Constance E. Beaumont, NTHP

Methylphenidate (Ritalin) Consumption, United States and Elsewhere: 1987 - 2001



Source: Science, Vol. 289, 4 August 2000, p. 721 and International Narcotics Control Board, 2002

- “...students have better attendance, are less likely to drop out, exhibit fewer discipline problems, and perform better when attending a smaller high school.”



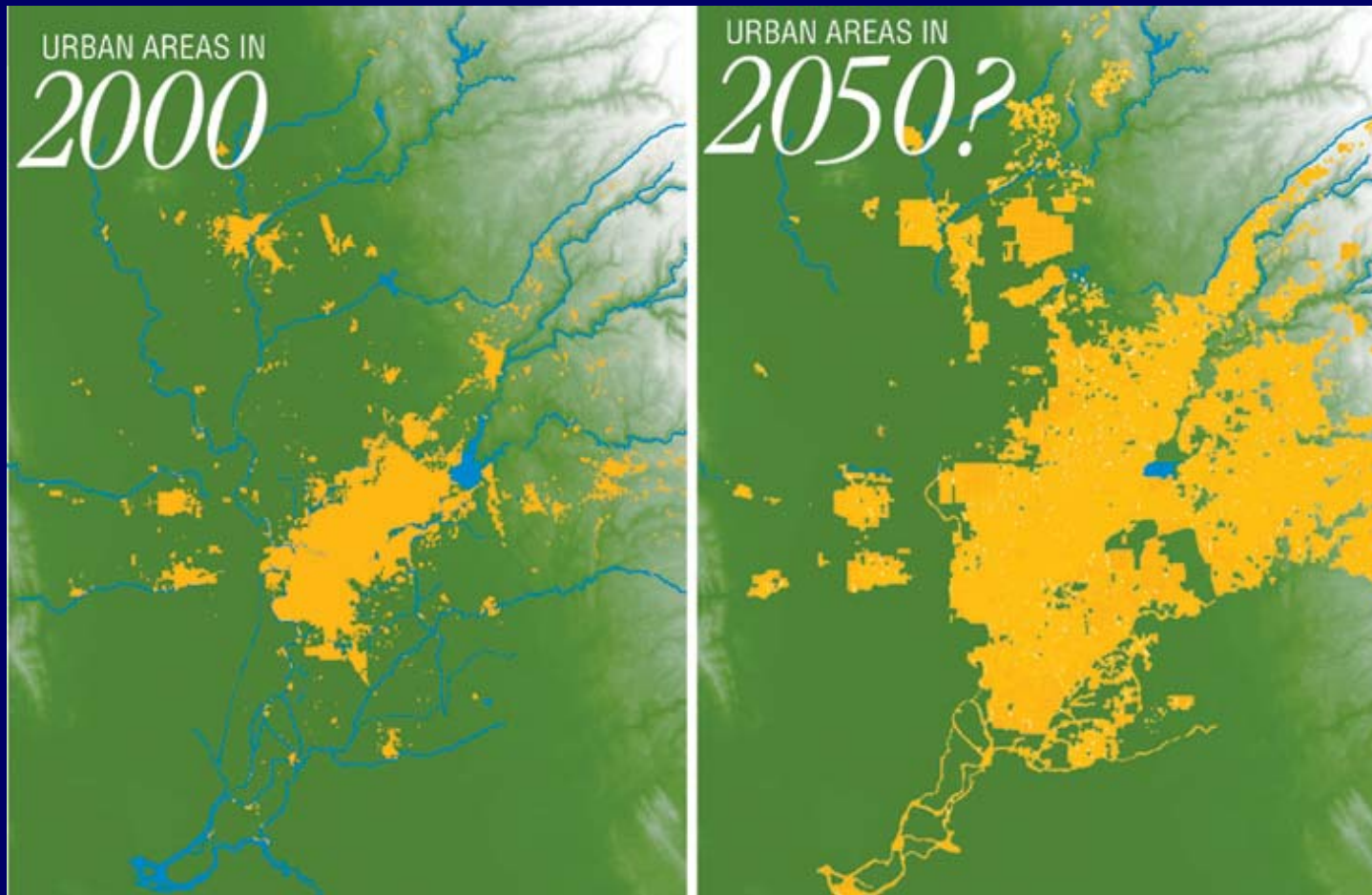
Credit: Constance E. Beaumant, NTHP

Supersized Communities



Current
Sacramento
“Foot Print”

If Current Sacramento Development Trends Continue



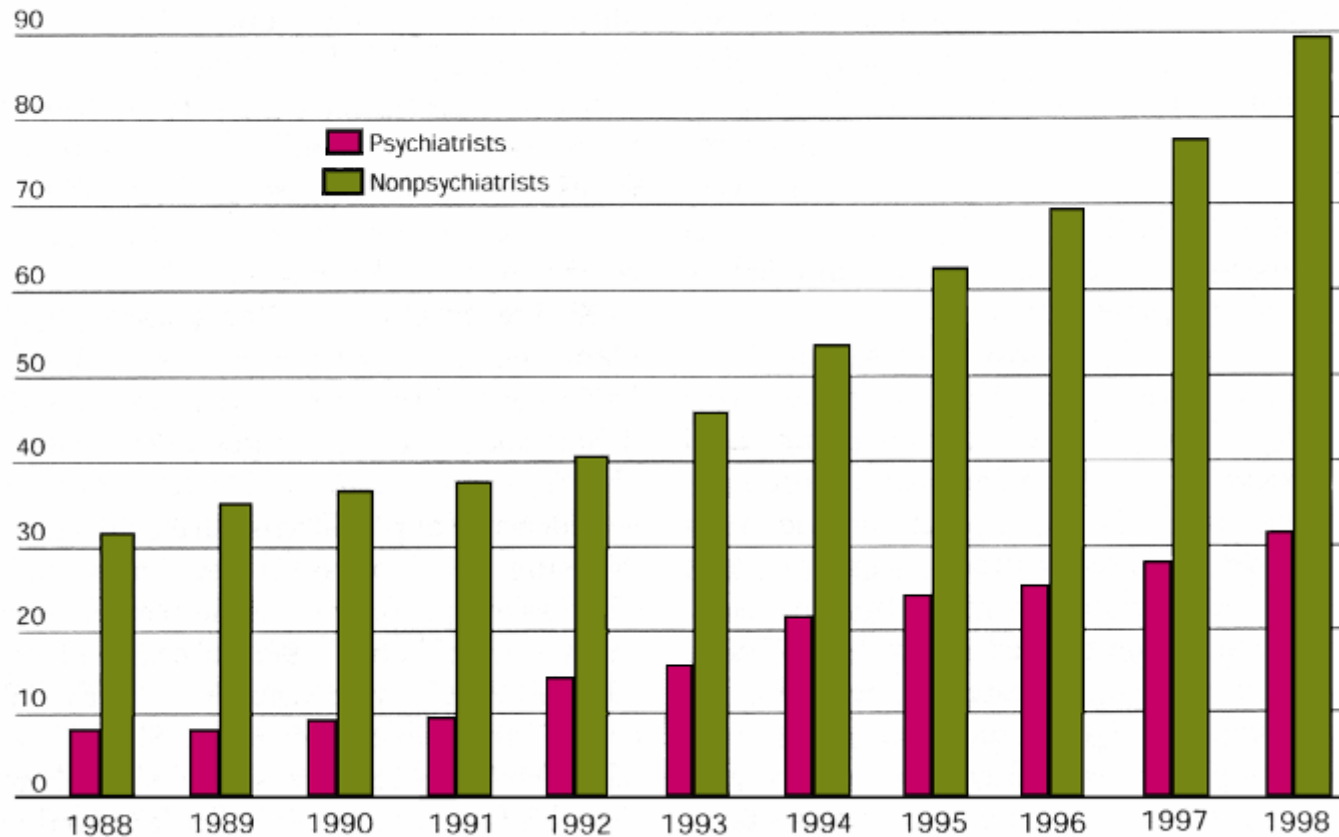
19 million
American
adults

Supersized Rates of Depression

- Leading cause of disability in the U.S. and worldwide

Antidepressant Prescriptions By Physician Specialty, 1988–1998

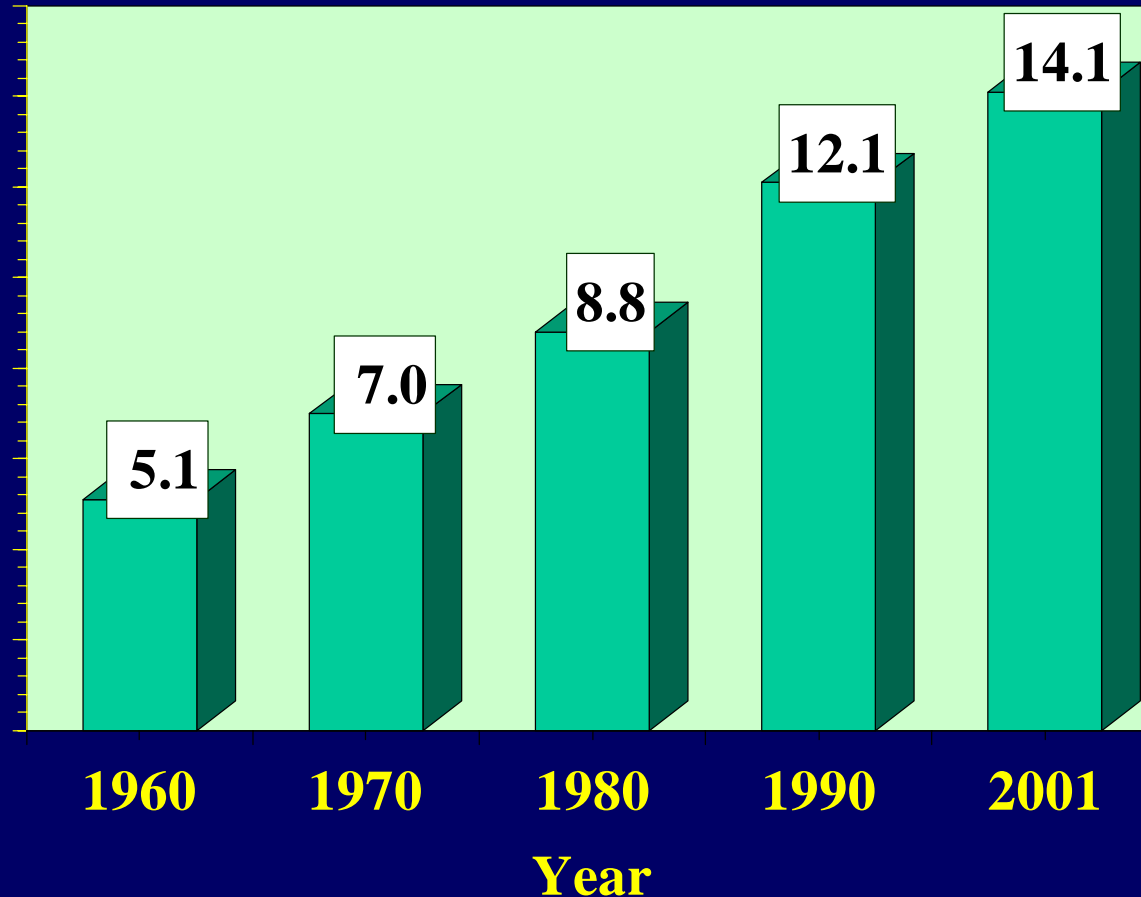
Millions of prescriptions



SOURCE: IMS Health, Inc.
HEALTH AFFAIRS - Volume 19, Number 4

Supersized Health Care Expenditures

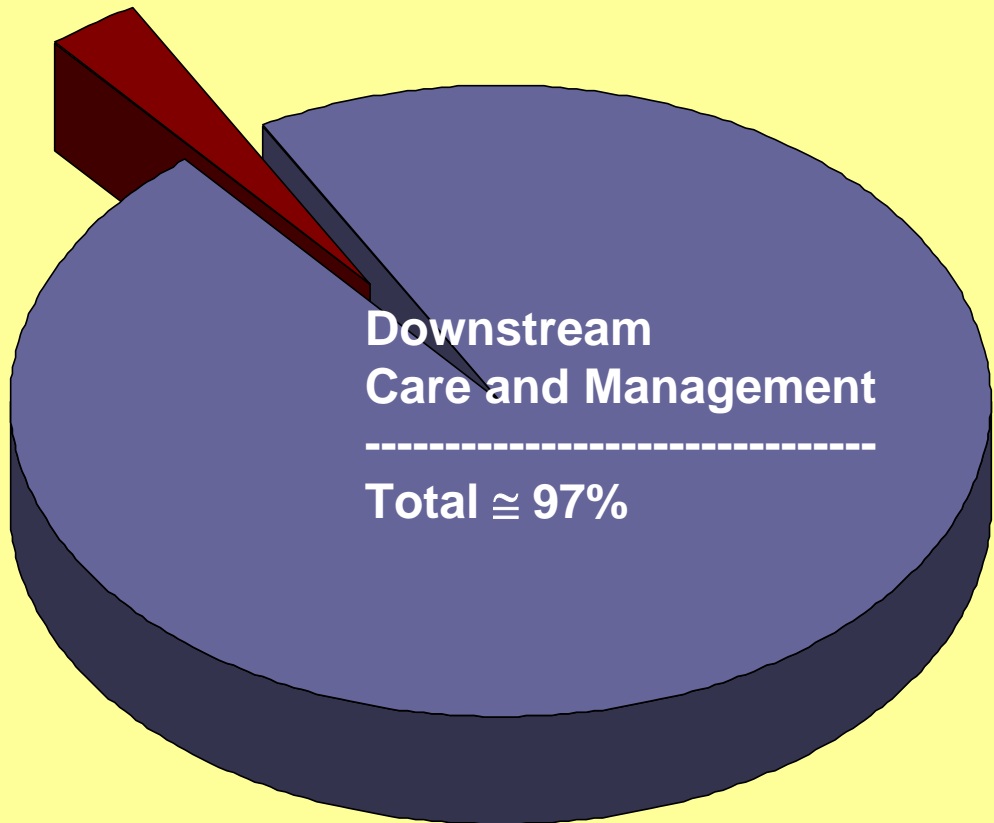
US Health Care Expenditures as Percent of GDP 1960 to Present



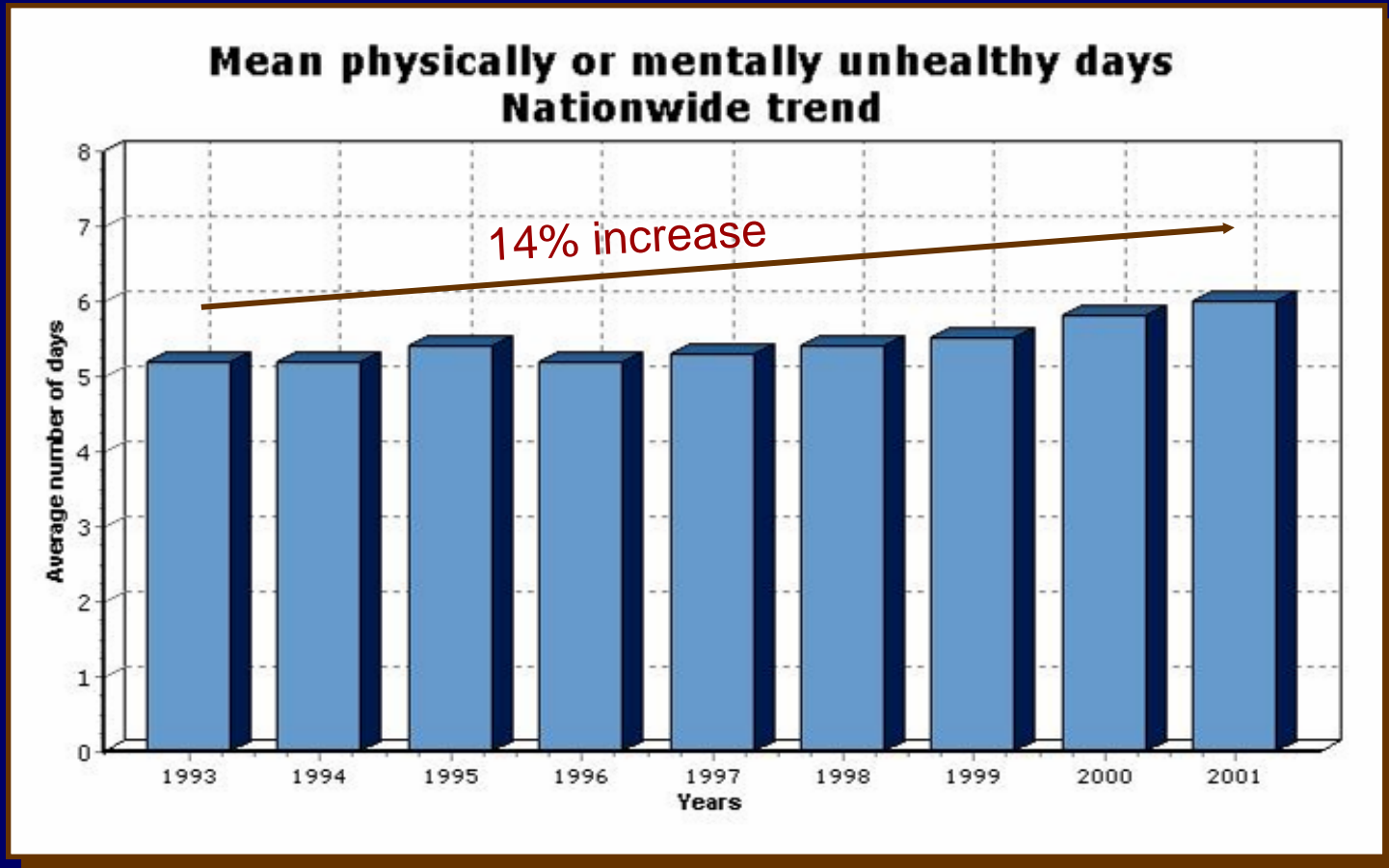
**\$1.4
Trillion
out of
\$10.08
Trillion
GDP in
2001**

Microsized Investment in Public Health, Protection and Prevention

Upstream
Prevention --
Total < 3%



Supersizing the number of days per month Americans Feel Unwell: Quality of Life Prevalence Data

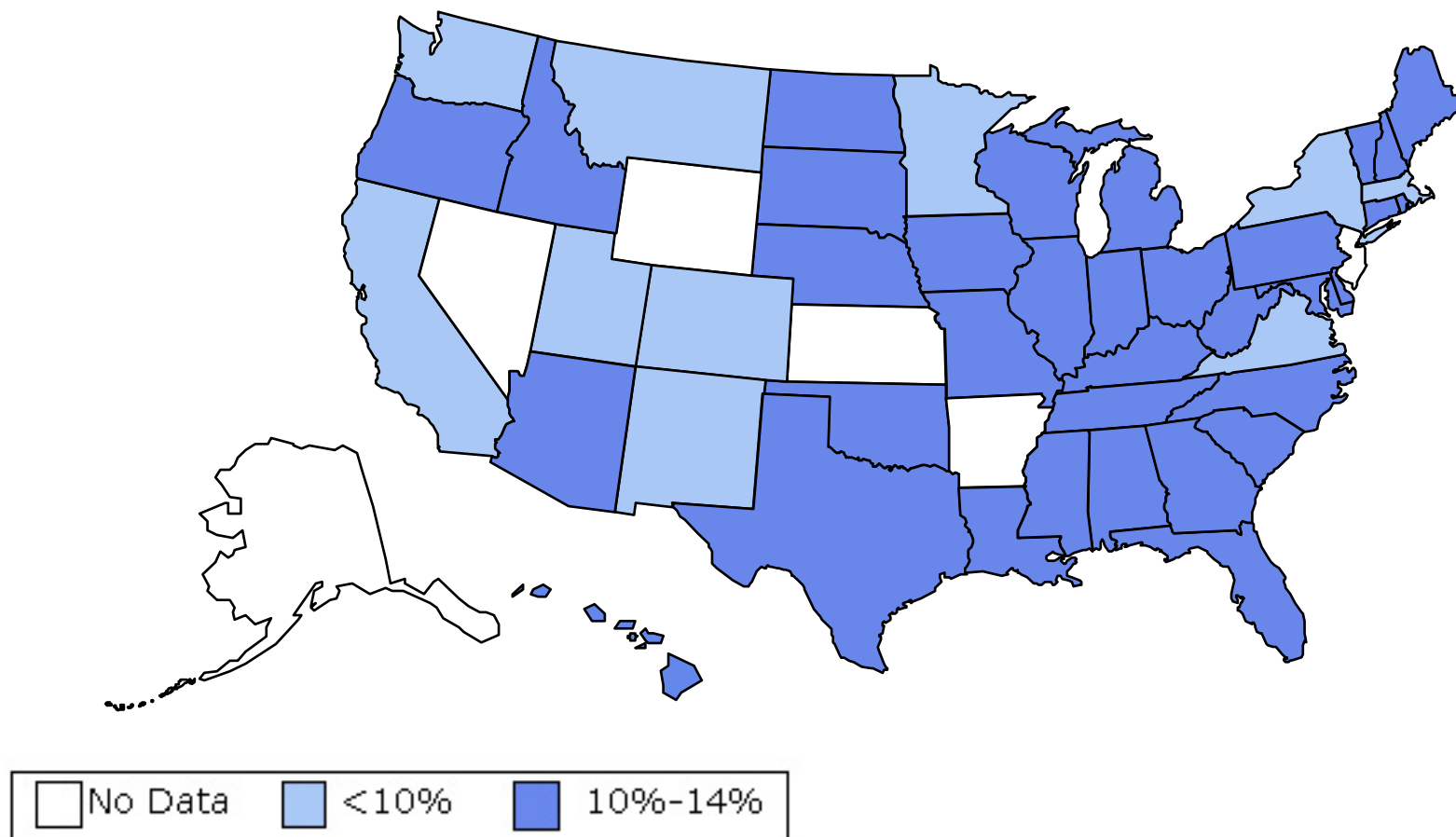


Source: Centers for Disease Control and Prevention. Health-related quality of life: prevalence data. National Center for Chronic Disease Prevention and Health Promotion, 2003. Accessed March 21 at <<http://apps.nccd.cdc.gov/HRQOL/>>.

Obesity Trends* Among U.S. Adults

BRFSS, 1990

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5'4" woman)

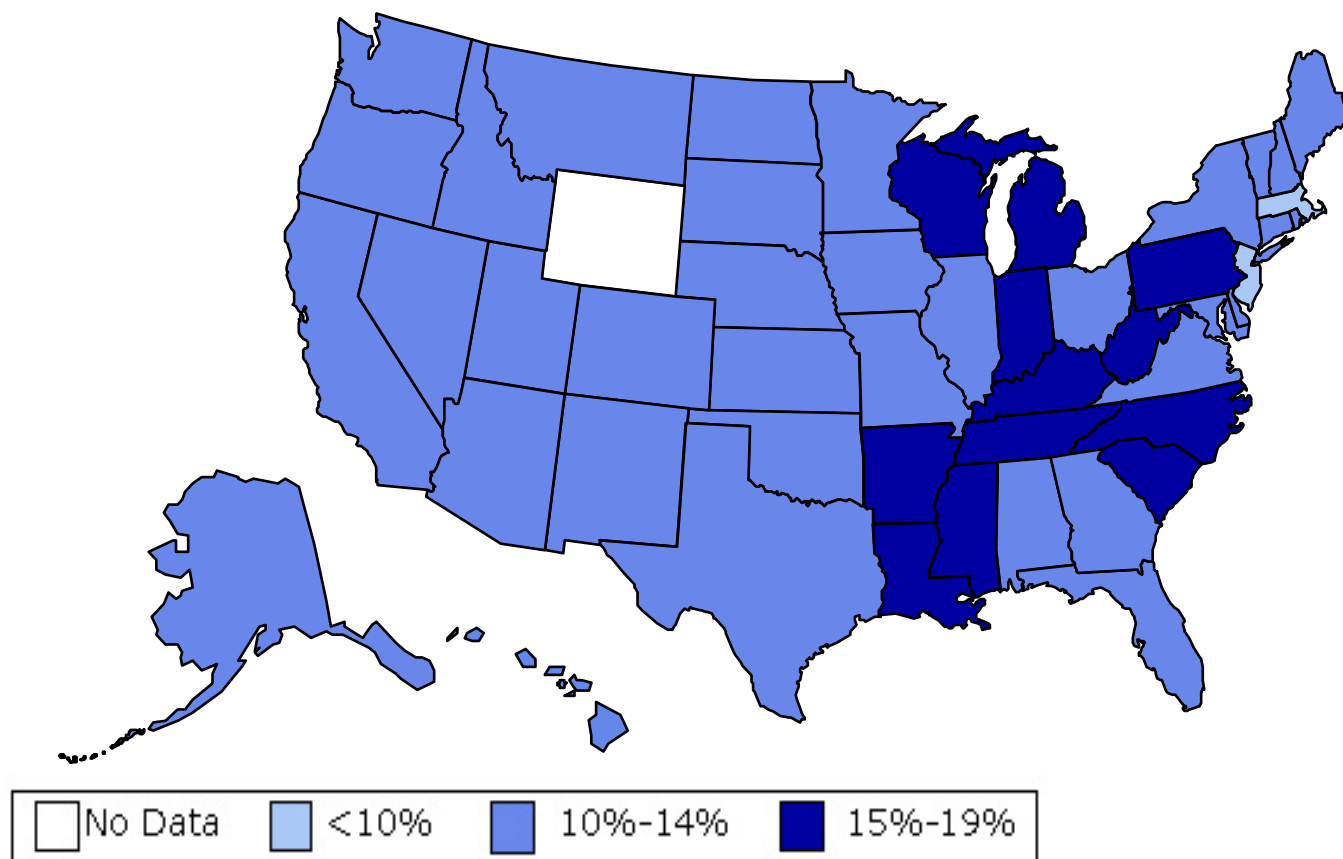


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

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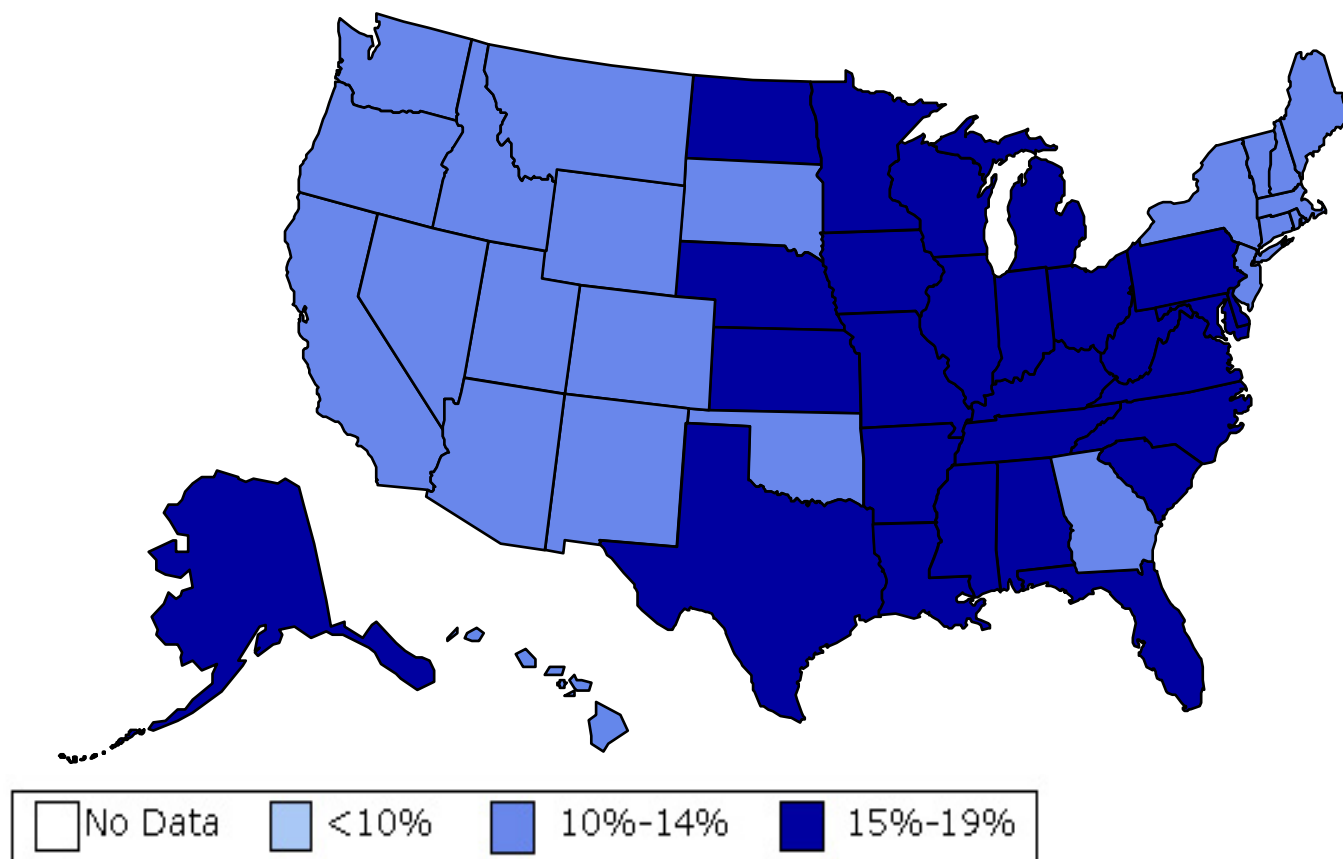


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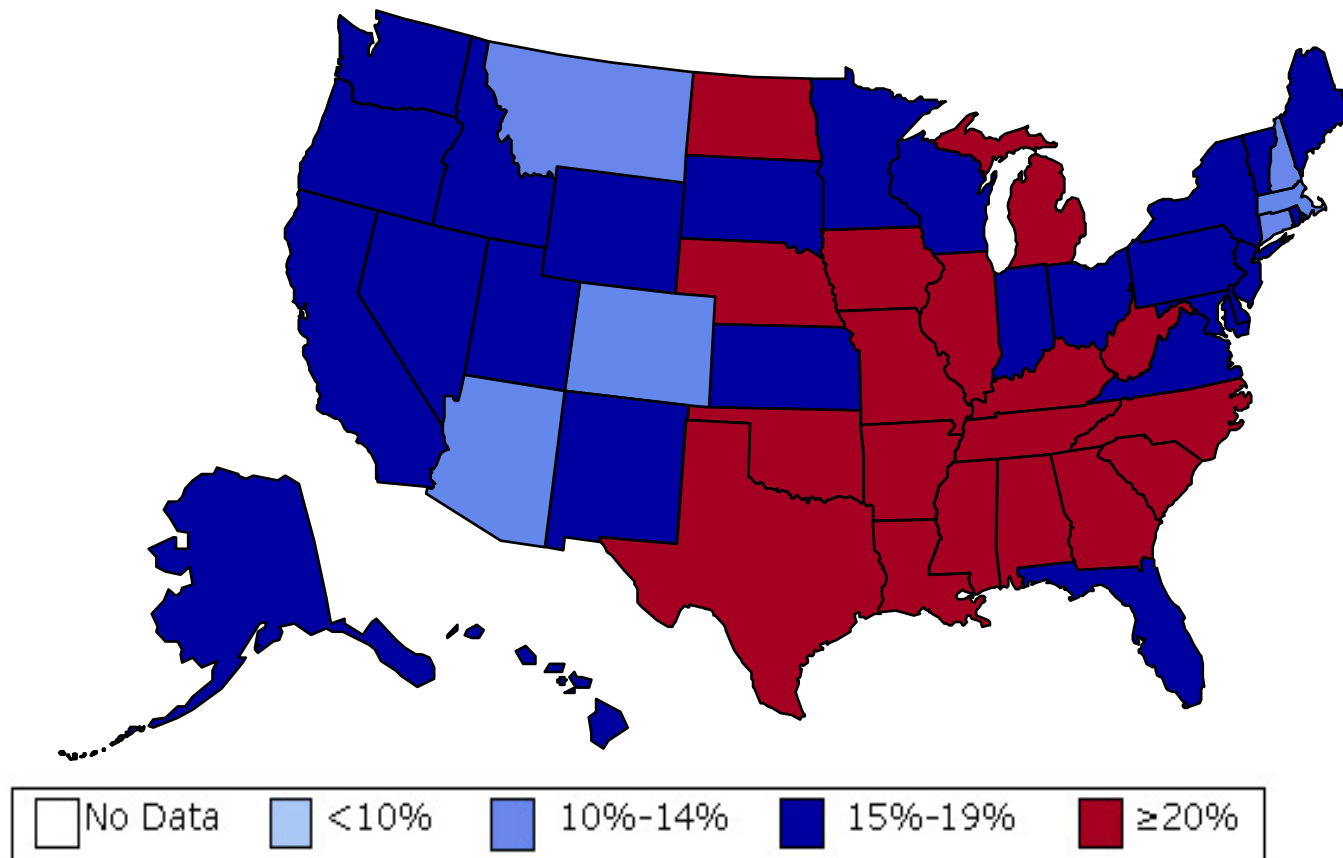


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282: 16, 2001;286: 10.

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BRFSS, 1999

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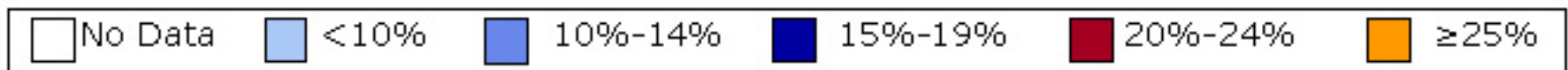
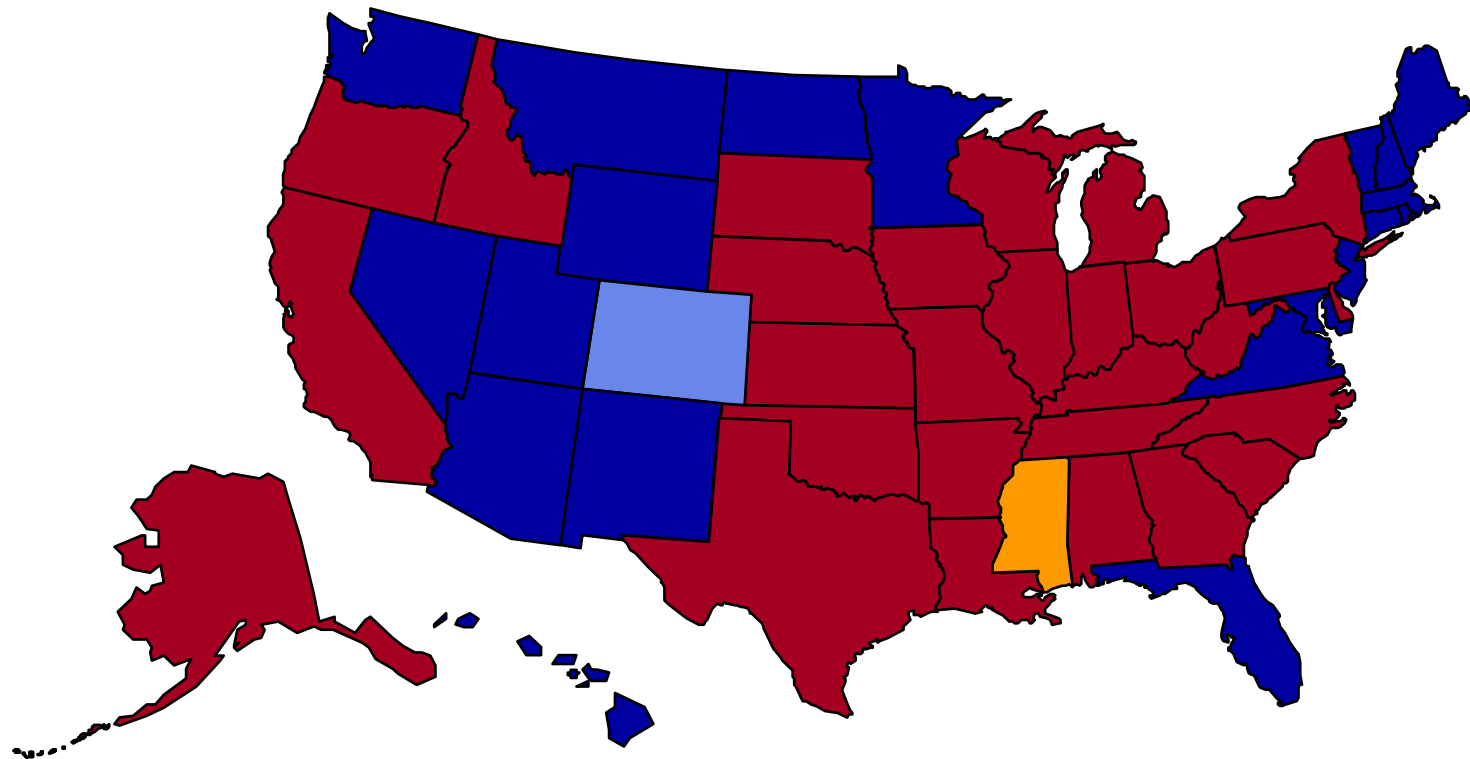


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282: 16, 2001;286: 10.

Obesity Trends* Among U.S. Adults

BRFSS, 2001

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5'4" woman)



Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

Highest Number of Low-income Overweight Children (age 2-5)

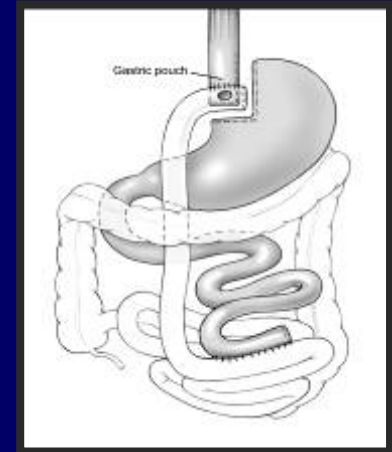
**California's Children Rank
#2!**

GI Surgery for Severe Obesity

Risk and Complications:

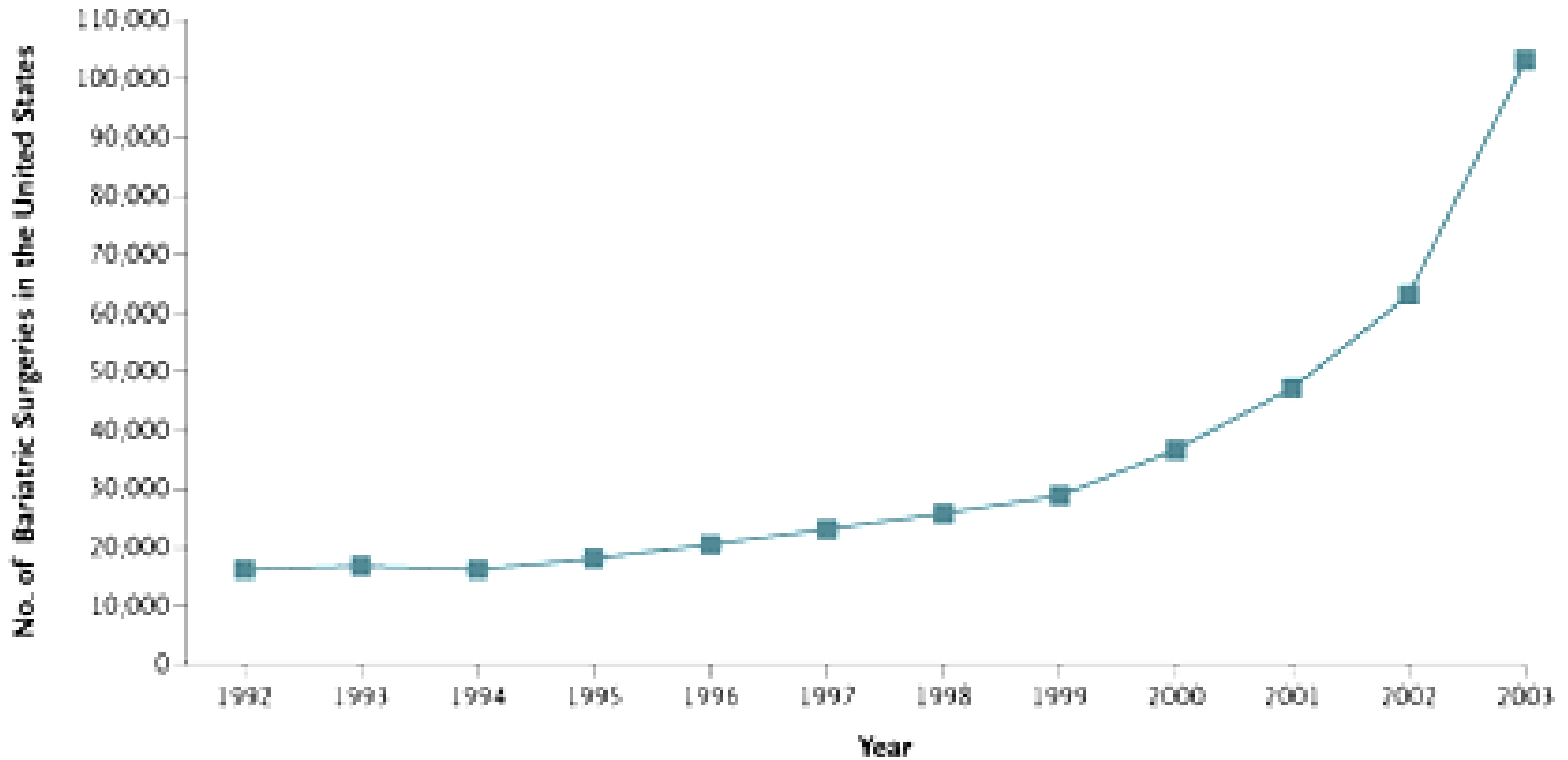
- 10-20% require follow-up surgery
- Abdominal hernia
- Break down of staple line
- Gallstones
- 30% develop nutritional deficiency

Cost: \$30,000 to \$50,000



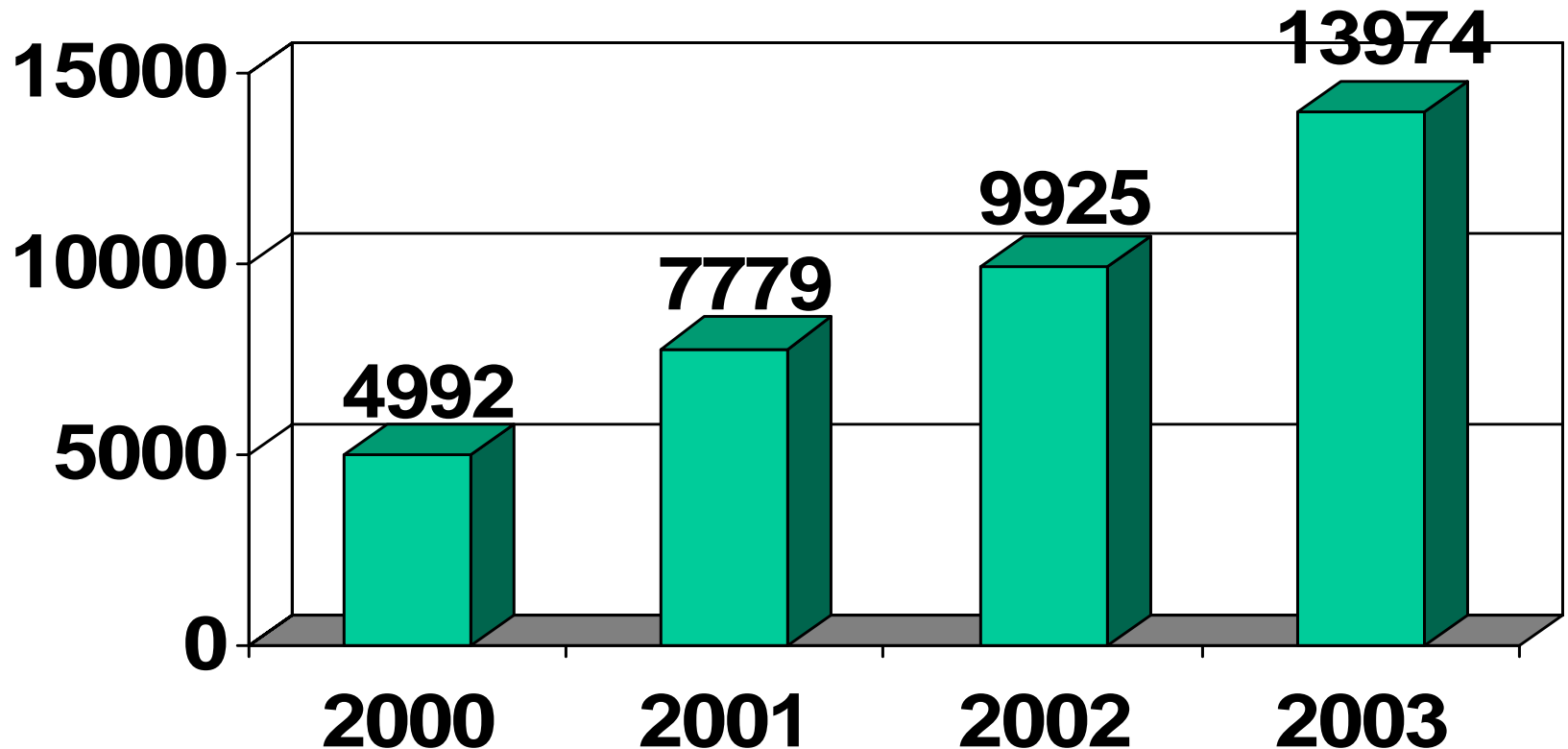
Source: NIDDK

Highest Increase Rate of all Pediatric Surgeries



Surgery for Severe Obesity: US 1992 to 2003
NEJM March 11, 2004

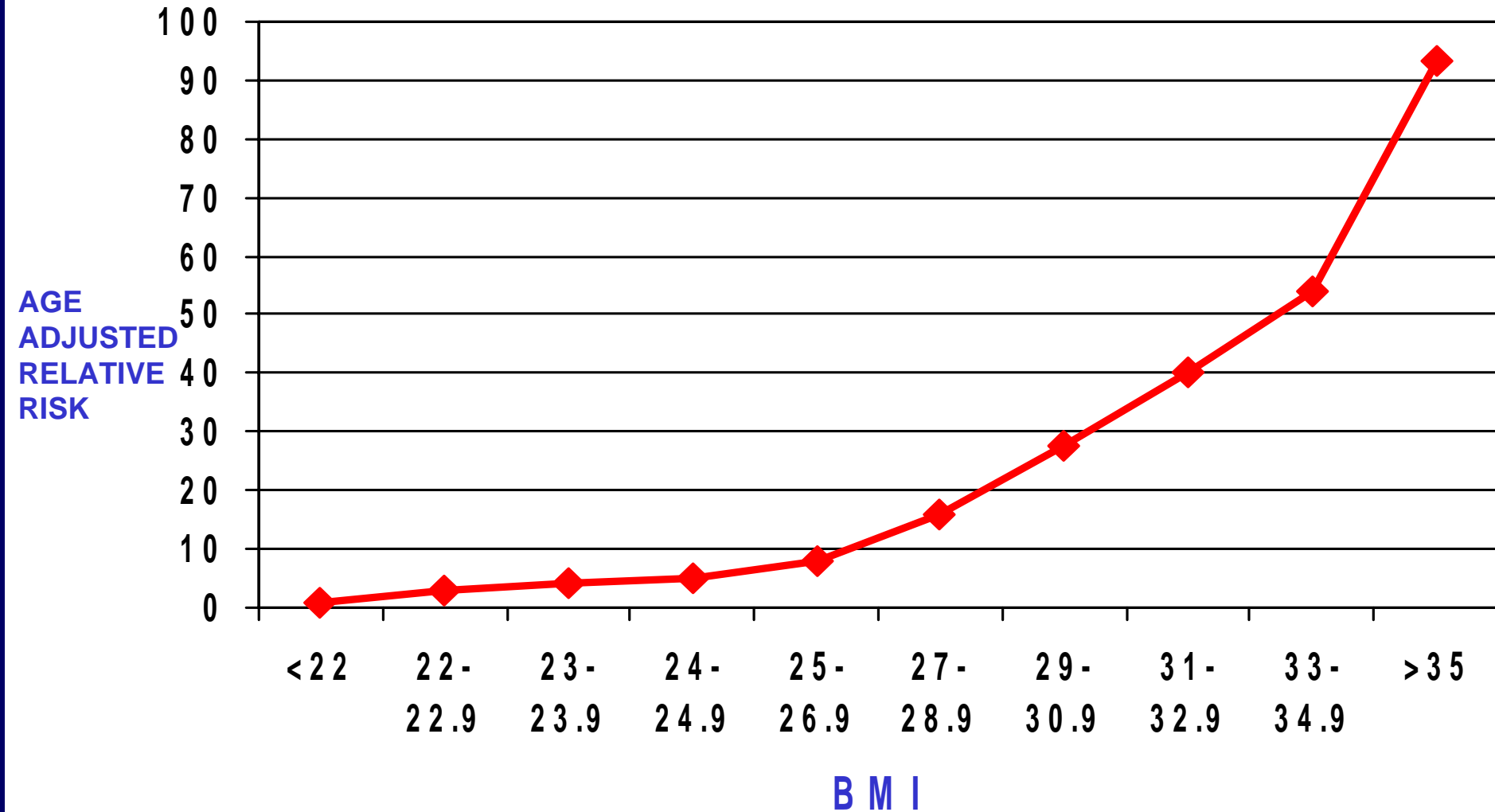
Bariatric Surgery Volume for California Hospitals



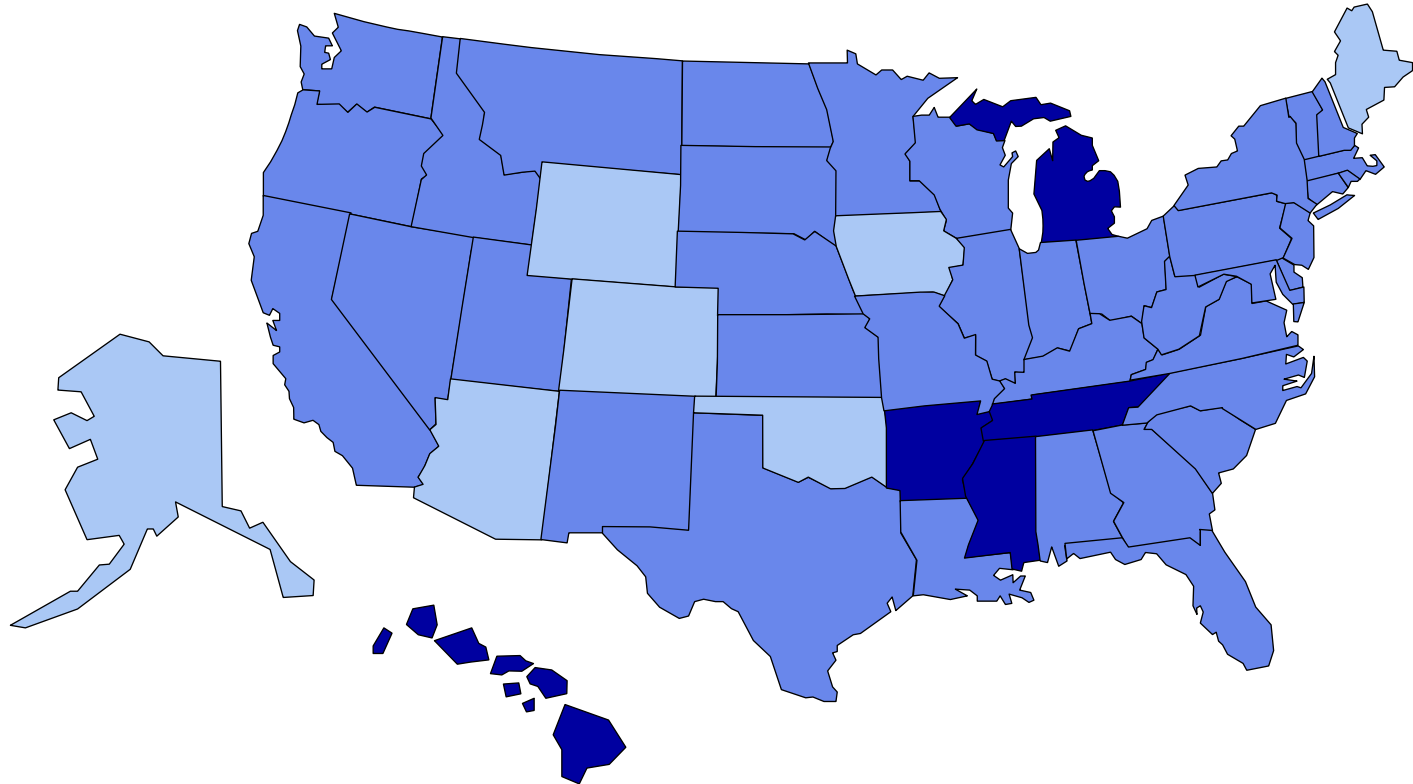
Average Cost per Surgery: \$20,000- \$50,000

Link Between Obesity and Type 2 Diabetes:

Nurses Health Study



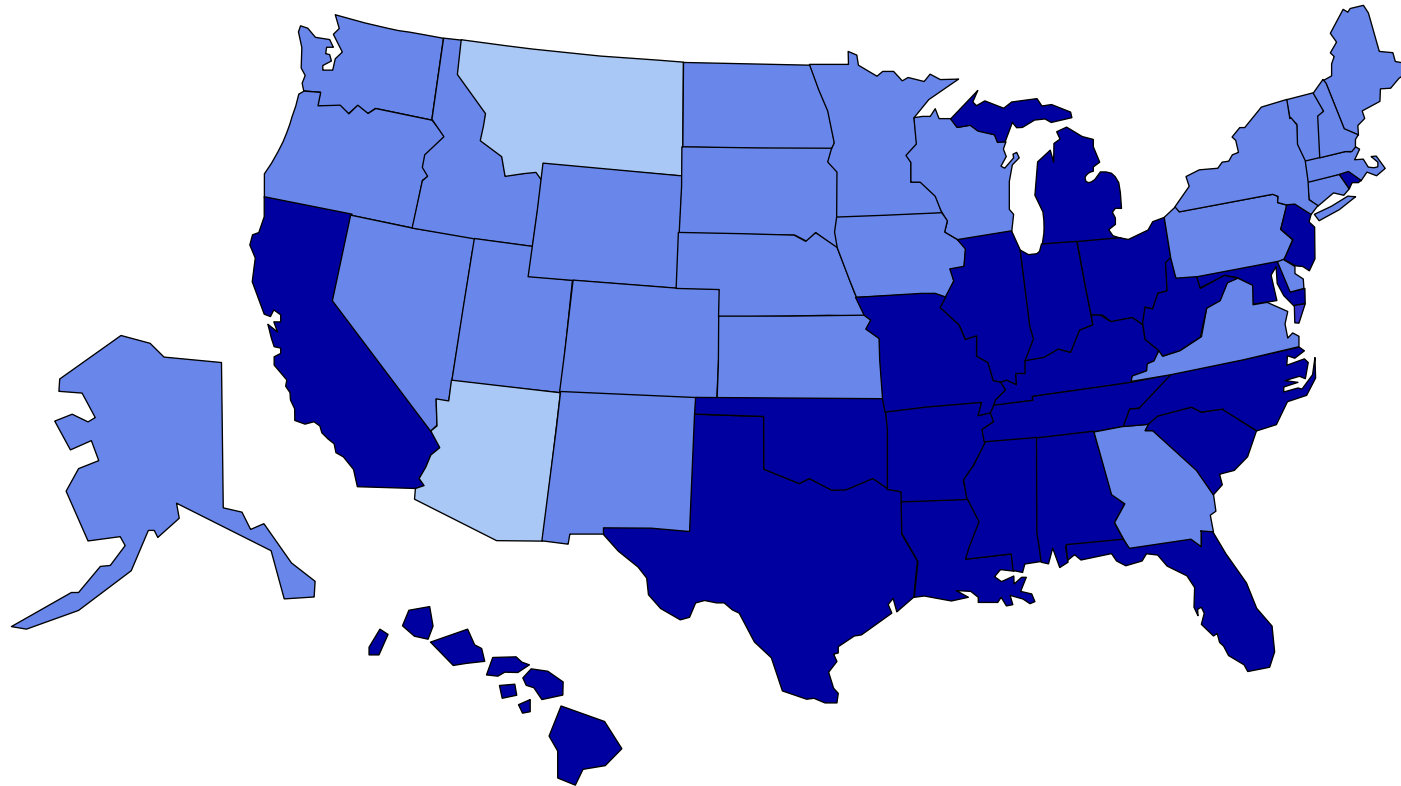
Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1993-94



No Data  $<4\%$  $4\%-6\%$  $6\%-8\%$  $8\%-10\%$  $>10\%$

Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).

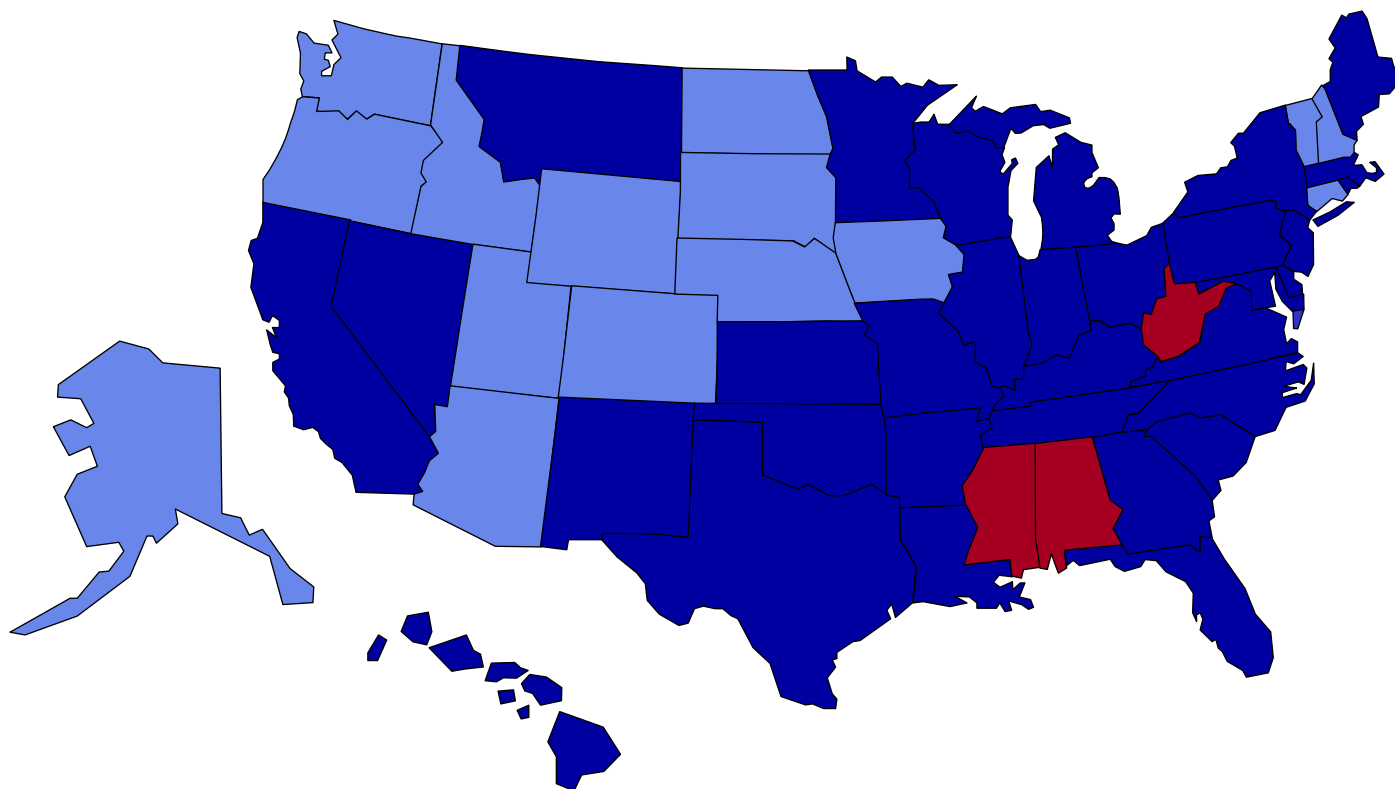
Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1997-98



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Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).

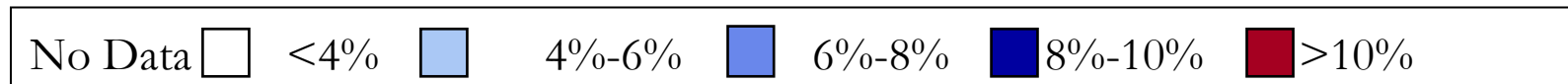
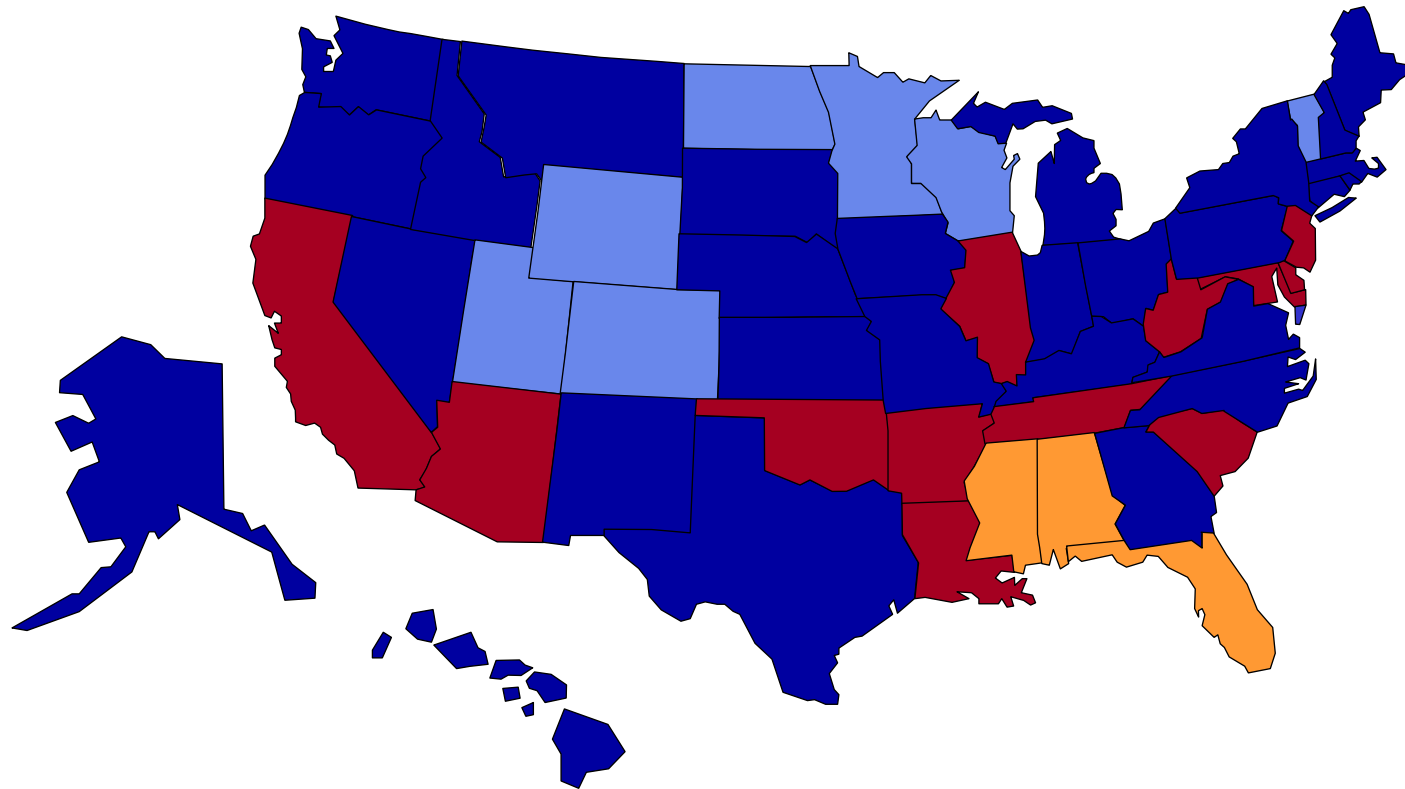
Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1999



No Data ☐ <4% ☐ 4%-6% ☐ 6%-8% ☐ 8%-10% ☐ >10%

Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).

Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 2001



Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).

Diabetes Projected Risks:

For Babies Born in 2000

Girls: 38% lifetime risk

- If diabetic before age 40, Lifespan shortened by 14 years (Quality of life by 19 years)

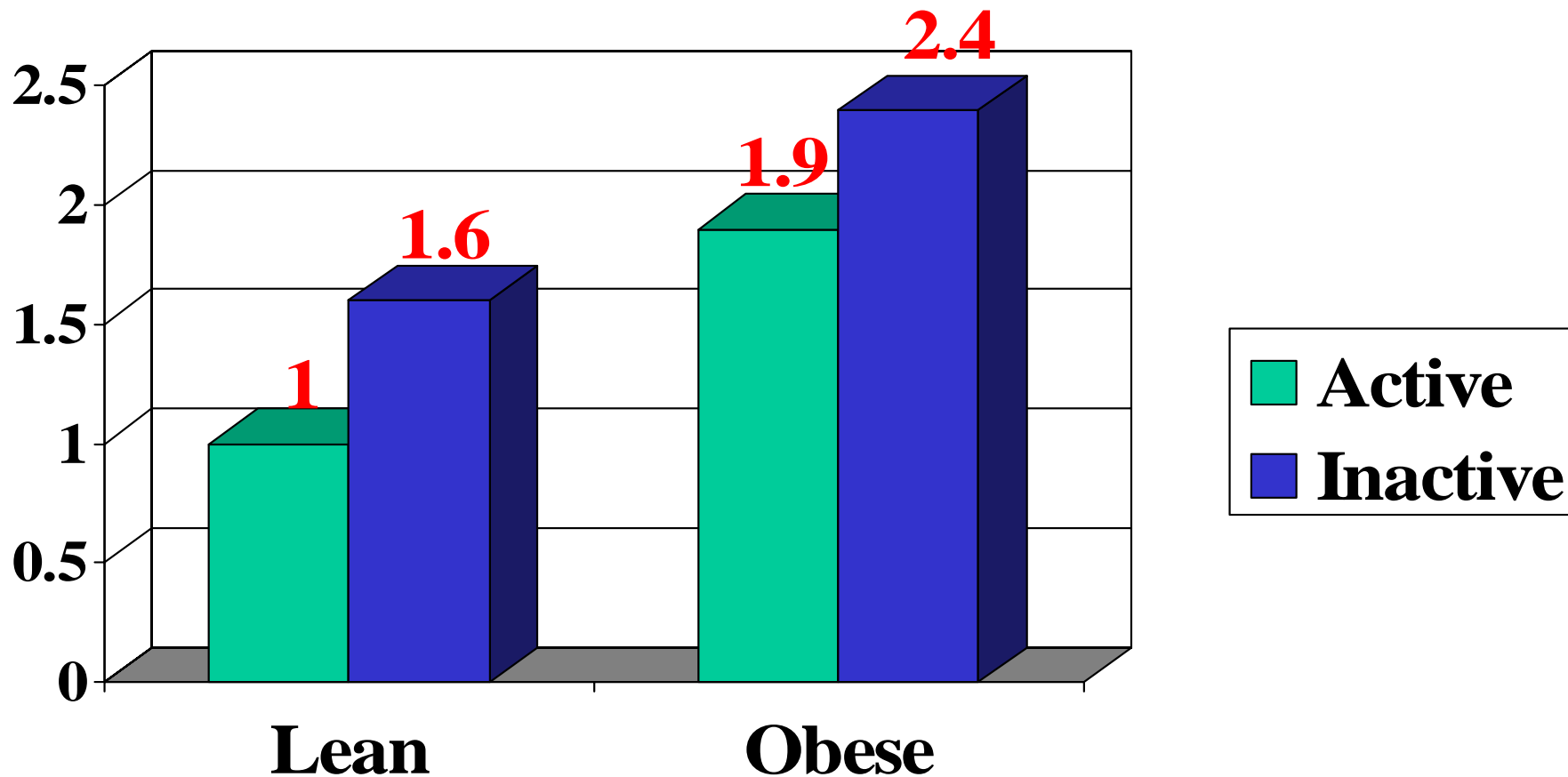
Boys: 33% lifetime risk

If diabetic before age 40, Lifespan shortened by 12 years. (Quality of life by 22 years)

“Fit vs. Fat”

Nurse Study 1976-2000

Risk of Death



Cost of Overweight, Obesity & Physical Inactivity California, 2000

| | <u>Billions</u> |
|----------------------|-----------------|
| Health Care | \$10.172 |
| Lost Productivity | \$11.168 |
| <u>Workers Comp.</u> | <u>\$.338</u> |
| Total | \$21.678 |

Projected Cost for 2005:

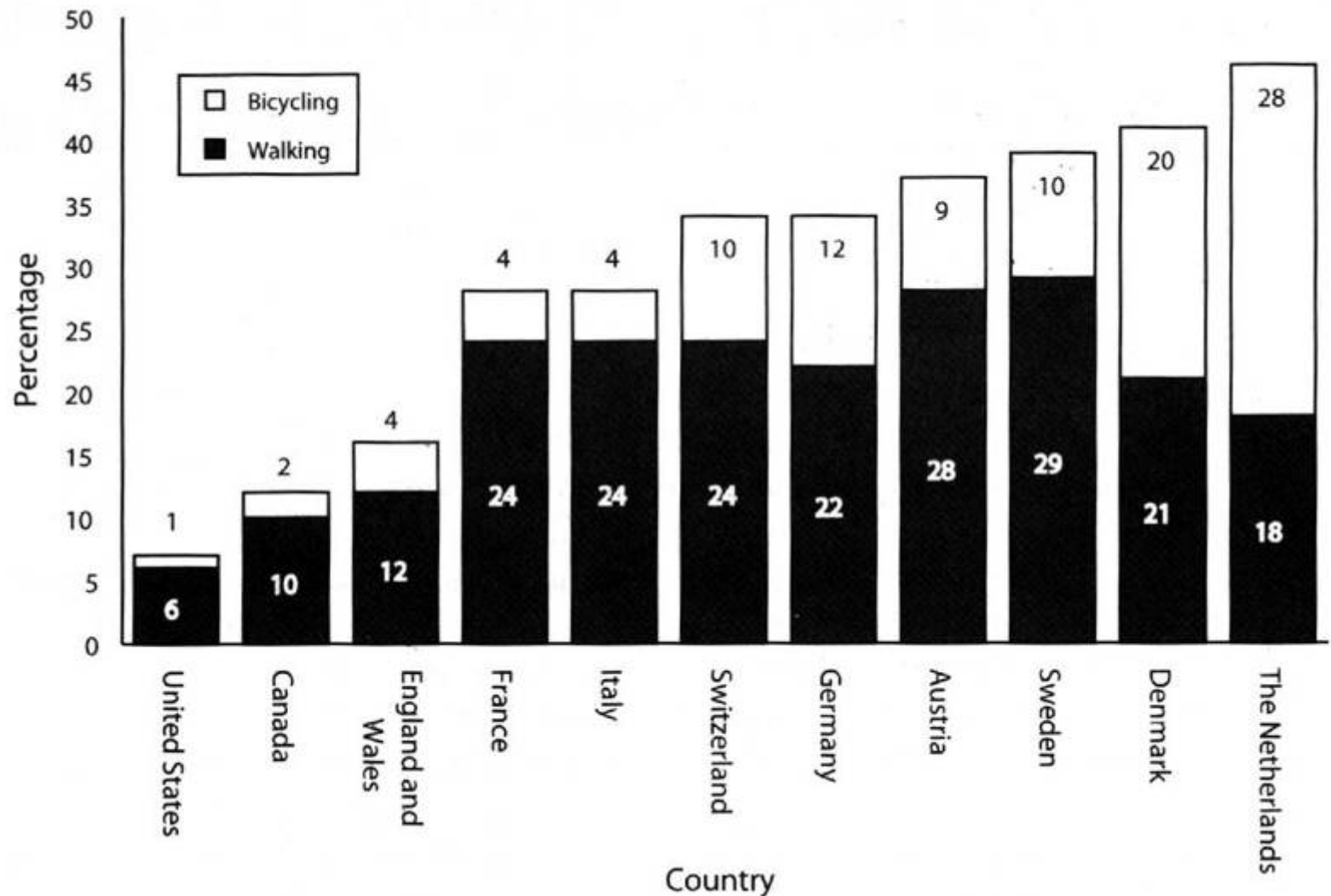
\$28 BILLION

Benefits of Physical Activity

- Increases life span by 2 years
- Reduces risk of CVD by 40%
- Prevents/manages high BP, Diabetes
- Decreases risk of breast & colon cancers
- Improves mood and mental health
- Contributes to weight control
- Health care costs for active adults are \$300-\$400 less per year

Surgeon General's Report, 1996

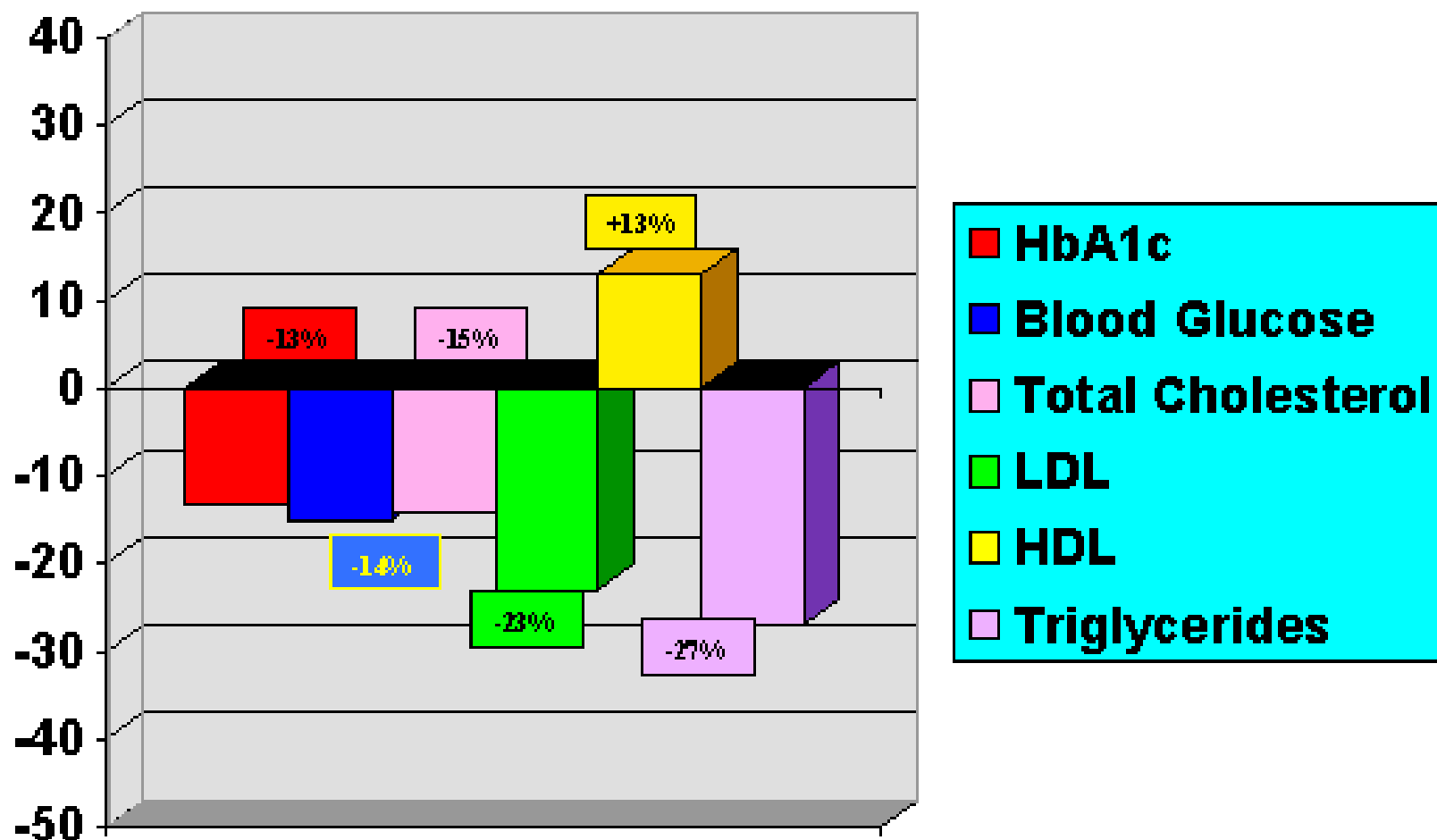
Percentage of Trips in Urban Areas Made by Walking and Bicycling: North America and Europe 1995



10,000 steps a day

- 3234 people with IGT (Pre-Diabetes)
- walked or exercised five times a week for 30 minutes
- lost 5% to 7% of their body weight
- reduced their risk of diabetes by 58%

Benefits of 10,000 steps



Urban Sprawl, Physical Activity, Obesity, and Morbidity

“Those living in Sprawling counties were likely to walk less ($p=.004$), weigh more ($p<.001$), and have a greater prevalence of hypertension ($p=.018$) than those living in compact counties.” (average six pound difference)

Ewing R et al: American Journal of Health Promotion
18 (1) Sept/Oct 2003

Healthy Kids Make
Better Students.
Better Students Make
Healthy Communities.

“Safe Routes to School”

- California Has Been a Leader
- Los Angeles has been a leader in Siting schools back closer to where children live

“Walking” School Bus



Exercise



Improved
opportunities for
walking and
jogging

Boyle Heights, California
East Los Angeles



Improved opportunities for walking and jogging

Boyle Heights, California

- ◆ Small, densely populated, predominantly Latino urban community
- ◆ Evergreen Cemetery is one of the area's main green spaces
- ◆ Traffic-related deaths and hospitalizations in Boyle Heights far exceed CA rates





- CDC now mandates its new Buildings have attractive, daylit stairways at main entrance.
- Elevators require more effort to get to than stairs

Community Action Grants

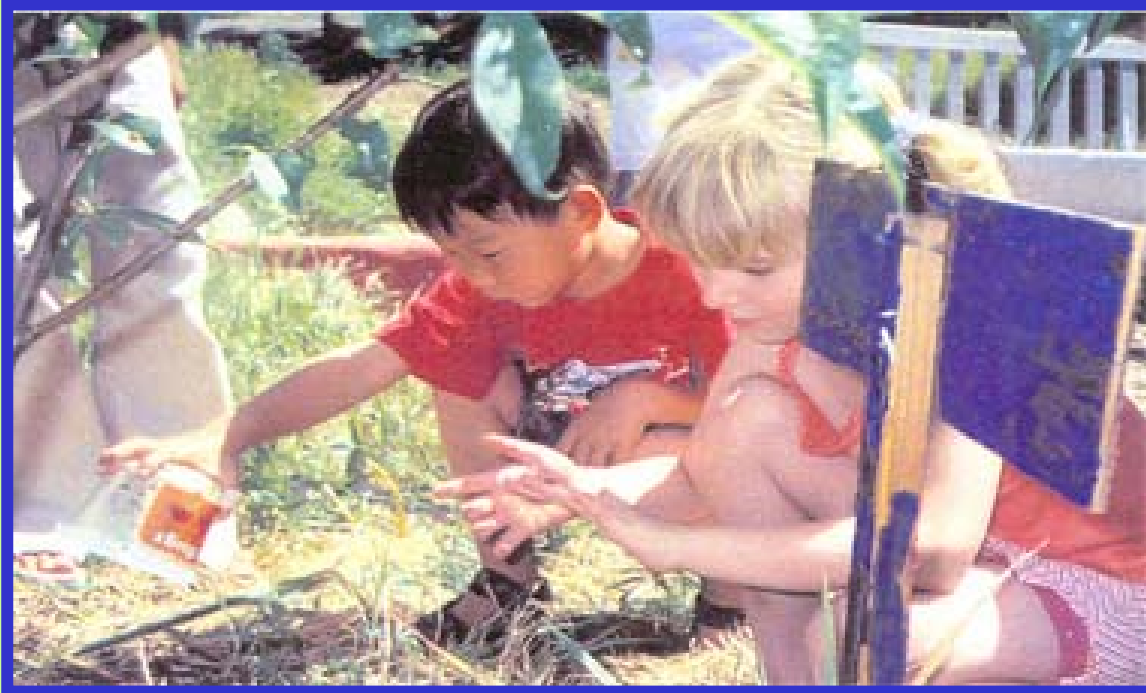
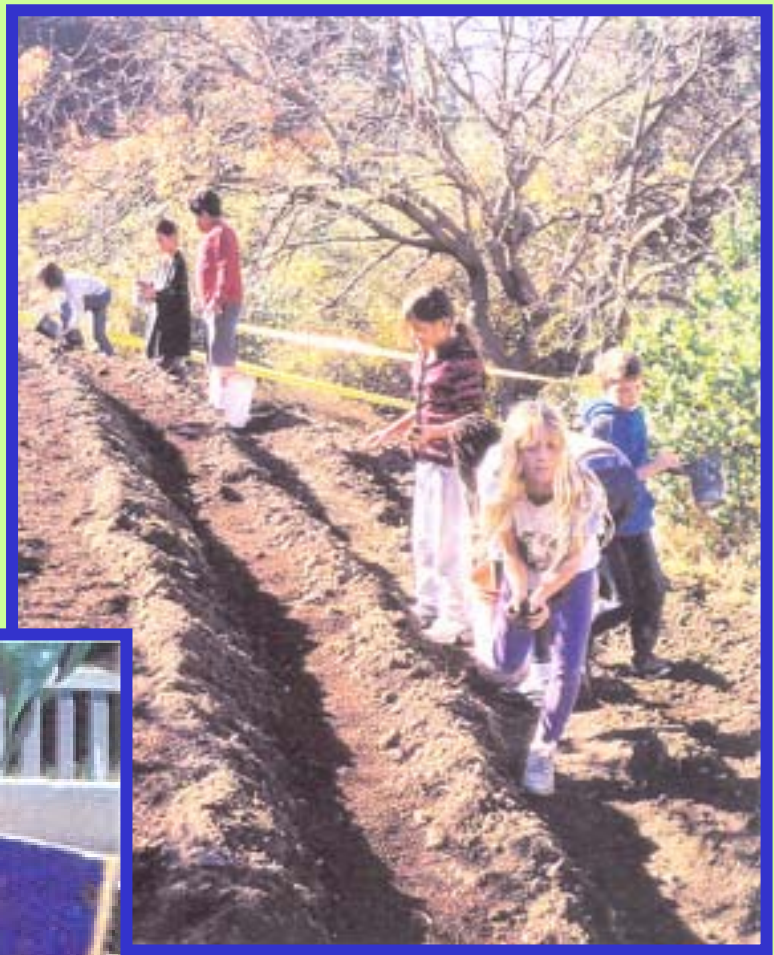
Target funding and support to collaborative initiatives that examine communities and develop an action plan to increase healthy eating and physical activity.



Multi-level Approach

School Gardens

A fun and active approach to nutrition and agriculture -and a move to Quality

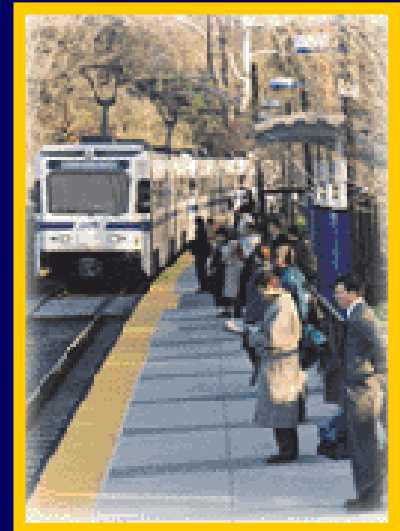


Healthcare Quality Improvement

- **Collaboration between healthcare providers, communities, local health departments, and Medi-Cal managed care plans**
- **Development and implementation of comprehensive obesity prevention (increased screening, counseling, referral) and weight management services.**

Tracking and Evaluation

- **Develop and implement surveillance and evaluation of obesity prevention efforts.**
- **Test innovative strategies, identify best practices, and evaluate cost effectiveness.**



Public Awareness and Education

- **Coverage of obesity-related topics and prevention efforts.**
- **Build public awareness and support for a healthy environment.**

Worksite Wellness

- **Develop and support sustainable employee wellness program that promotes healthy eating and physical activity.**
- **Will be evaluated and used as model for other state agencies and businesses.**





CDC Healthy Places Website

www.cdc.gov/healthyplaces

- Journal of Health Promotion: Full September Issue
- Increased Research Support From NIH
- Active University Planning/Health Collaborations